First to Fire Newsletter

Operation Iraqi Freedom

Air Defense Artillery units performed brilliantly in Operation Iraqi Freedom, intercepting every Iraqi missile launched at Kuwait or Coalition forces except those that weren't engaged because their trajectories would cause them to fall harmlessly into the empty desert or the open ocean. Patriots, Avengers, Bradley Linebackers and Stinger teams covered the advancing coalition forces from the Kuwait border to Baghdad International Airport. In Israel, U.S. Patriot batteries successfully integrated their firepower with the upper-tier Arrow system while other U.S. Patriot soldiers performed a highly sensitive mission by deploying Patriot fire units to Jordan.

The air and missile threat to friendly population centers and our maneuver forces was robust, ever present and—details are classified—even more varied than anticipated. The Iraqi launched no Scuds at Israel, Jordan or Turkey, but they helped validate air and missile defense doctrine by launching more accurate, shorter-range missiles into Kuwait and at our command posts, base camps and advancing maneuver forces. Air defenders were in the thick of the fight. Our divisional air and missile defense units kept pace with armored and cavalry units in the swift advance on Baghdad. Denied aerial targets, a 1-3 ADA Bradley Linebacker platoon fought off "homicide" vehicles during a four-and-a-half day struggle for control of a bridge that Iraqi militia had been using to launch attacks against one of our main supply routes.

We celebrated our battlefield successes with a broken heart. Videos of captured and slain soldiers from the 11th ADA Brigade's 507th Maintenance Company and, potentially, two friendly fire incidents involving U.S. Patriot batteries cast a pall over a splendid showing for Air Defense Artillery in the early stages of Operation Iraqi Freedom.

Special Forces soldiers staged a daring and much celebrated nighttime rescue of Pfc. Jessica Lynch, but her rescuers discovered the bodies of other 507th soldiers previously listed as prisoners of war or missing in action. At Fort Bliss, the flag flew at half mast as the post and civilian community rallied to support bereaved families. See Fort Bliss/ADA Heroes of Operation Iraqi Freedom for news articles and feature stories on the 507th tragedy and the exploits of other ADA soldiers in the theater of operations.

The friendly fire incidents were tragic. In Kuwait, a Patriot missile intercepted and destroyed a British Tornado, killing its two pilots as they returned to Kuwait from a mission over Iraq. The Patriot brigade commander visited the Royal Air Force detachment to pass on his condolences to the families of the dead pilot and navigator.

Pfc. Jessica Lynch became Operation Iraqi Freedom's most publicized soldier

A U.S. Navy pilot died in the second friendly fire event. A Patriot system is believed responsible for shooting down his F/A-18 Hornet on April 2 near Karbala.

The U.S. Army Central Command is investigating both friendly fire incidents; however, early indications are that our air and missile defense systems performed to near perfection. "Embedded" media accounts of successful missile intercepts are far from 100-percent accurate, but the picture they paint of Patriot performing its force protection in superlative fashion is genuine.

"Just to the right of the 110-vehicle convoy, a Patriot anti-missile battery answered, with the sparkling contrails of two missiles clearly visible as they soared toward an impact point nearly six miles away," reported a *National Journal* correspondent embedded with the V Corps Forward Tactical Command Post. "Within minutes, the Patriot battery reported a successful intercept and confirmed that the [Iraqi missile] would have hit the ground less than a third of a mile in front of the convoy." According to the *Milwaukee Journal Sentinel*, soldiers of the 159th Aviation Brigade, 101st Airborne Division (Air Assault), gave Patriot soldiers a "standing ovation" when they downed an Iraqi missile heading for the Screaming Eagle's Black Hawk and Chinook helicopters.

"Saddam's missile was aimed squarely at the Camp Doha command post for the Coalition land assault. Had it hit, American and British commanders of the land war may well have perished. This crucial Coalition headquarters could have been wiped out," reported a Fox News journalist, who may have been a bit confused about command relationships between air and ground components, but nevertheless, understood perfectly that Patriot had thwarted what might have been a crippling blow.

"Those of us who spent last week in the Kuwaiti desert are here to tell you ballistic-missile defense

works, providing civilians and troops alike with a marvelous shield against nasty dangers," reported the *American Enterprise*. "American antiballistic-missile technology was demonstrated to be the defensive bulwark of our future."

On March 28, Kuwaiti Patriot soldiers trained by the ADA School scored their second successful intercept. Led by COL Jasem Al-Huwaitan, Kuwaiti Patriot Battalion Commander, these Kuwaiti air defenders signal our success in exporting our air and missile defense technologies and expertise to allied and friendly countries.

ADA soldiers, amid howling sandstorms and raging firefights, performed like heroes. ADA doctrine, training tactics, techniques and procedures, and technology have been dramatically revalidated on the field of battle. Iraqi Freedom after-action reports will provide valuable lessons learned that will bolster our efforts to create the objective battlefield air and missile defense.

32nd AAMDC Commander Says GEMs Scored Most Iraqi Freedom Intercepts

Brig. Gen. Howard Bromberg, Commanding General, 32nd Army Air and Missile Defense Command, told *Inside the Pentagon* (April 24) that all but two of nine U.S. and Kuwaiti Patriot intercepts of Iraqi missiles over a 13-day period beginning March 20 were performed by Guidance Enhanced Missiles, or GEMs. Most engaged missiles were Al-Samoud and Ababil-100 surface-to-surface rockets fired from southern Iraq towards Kuwait, often operating on the outer limits of their approximately 90-mile maximum range. Older Patriot systems, loaded with GEMs, were often the appropriate weapon against the shorter-range missiles Iraq shot south. "The good thing about the Patriot system is it looks at the target coming in" and, based on its characteristics, "selects the best missile to fire," Bromberg said.

Stryker Brigade Completes 'Arrowhead Lightning I' at NTC

The Army's first Stryker Brigade Combat Team on April 11 ended several weeks of rigorous day and night training during Arrowhead Lightning I at the National Training Center. It is now preparing for Arrowhead Lightning II May 18 at the Joint Readiness Training Center to certify its operational readiness.

The Air Defense and Airspace Management (ADAM) Cell participated in the SBTC's initial Operational Evaluation as a key component on the simulated NTC battlefield. Because the SBCT currently has no organic ADA assets, C/5-5 ADA (BSFV/Stinger) augmented the SBCT to provide air defense "shooters and sensors." Only C/5-5 ADA's Sentinel section (radars) will participate in the SBCT's Certification Exercise (CERTEX) at JRTC.

According to Capt. Scott Mace, the ADAM Cell proved a valuable asset. Assigned to 3rd Brigade, 2nd Infantry Division, SBCT, Mace serves as the ADAM Cell officer in charge.

"The ADAM cell provided situational awareness to the brigade commander throughout the rotation," Mace said. "It was good to show the blue combat air support missions flying into our AO and be able to work targets from our AMDWS screen. The Air Force OC's had not seen that done before. Between the battery commander and the ADAM Cell OIC working together, we were able to create an air defense plan that allowed us to kill 16 of 17 Hinds from training day 6 to 11. The COG of NTC stated that this was a tremendous credit to the unit. Half of the targets killed were killed by Combined Arms For Air Defense (CAFAD). This is considered a credit to air defense since it is our responsibility to provide early warning to the SBCT.

"The training was good, but still did not flex the full capabilities of the ADAM cell," Mace continued. "The good news story is that we were able to use the systems we had to conduct a successful rotation. Given a real operational tasking, we would be allowed to use all of our equipment and would be able to provide an even better picture of the airspace over the brigade to the commander and the maneuver forces. There were several lessons learned at NTC, and we will add TTP's to improve our operational readiness at the CERTEX in May.

"We are certainly showing to the SBCT evaluators that air defense is a valuable asset and should be an organic part of the SBCT," he continued. "The brigade commander wants to include ADA units in all of his exercises. Soldiers who operate the ADAM cell strive hard to represent our Air Defense Corps by putting on a good show for the combined arms team."

The Stryker Brigade Combat Team is preparing for Arrowhead Lightning II at the Joint Readiness Training Center, Fort Polk, La.

Arrowhead Lightning I required the SBCT to conduct mid-to-high-intensity combat operations against the NTC's opposing force. The brigade executed missions such as clearing zones, attack and defense. Designed to operate in a 50-by-50-kilometer area, considerably larger than traditional infantry brigades, the Stryker Brigade made full use of its speed, agility, enhanced situational awareness, and intelligence-gathering assets to operate throughout an extended battlespace

"We're on track," said Lt. Gen. Edward Soriano, commander of I Corps and Fort Lewis, Wash., home of the SBCT, 3rd Brigade, 2nd Infantry Division. "The training went very well and the SBCT learned a lot. "I'm pleased with the progress, and I'm pleased with the leadership of the Stryker Brigade Combat Team," Soriano said. "The training was very intense."

TRADOC white paper recommends delaying reductions in Short-RangeAir Defense systems until future systems are fielded.

Aerostat Deployed in Afghanistan

Inside the Army reported April 14 that the Initial Joint Land Attack Elevated Netted Sensor (JLENS) aerostat capability has been deployed to Southwest Asia. According to the article, JLENS will provide force protection for troops in region, while providing feedback on the system's tactical deployment.

SHORAD Study Supports Total Army Analysis

Stating that the air threat to maneuver forces is again on the rise, a recently published U.S. Army Training and Doctrine Command (TRADOC) white paper recommends delaying reductions in the Short-Range Air Defense (SHORAD) force or changes to Short-Range Air Defense (SHORAD) rules of allocation until SLAMRAAM takes its place on the battlefield. The white paper contradicts views that post-Cold War U.S. air superiority makes it safe to take SHORAD battalions out of the division.

In April 2002, the Office, Secretary of Defense, (OSD PA&E) responded to an Army request for additional force structure to carry out new missions based on the new National Military Strategy by identifying Army Force Structure Alignments that could be made to free up structure to meet these new missions. One area identified for realignment was Divisional Short-Range Air Defense (SHORAD).

OSD recommended that SHORAD be reduced consistent with U.S. air superiority. OSD further recommended the elimination of all Divisional SHORAD battalions and retention of nine Echelon-above-Division (EAD) SHORAD battalions to meet unforeseen contingencies.

In May 02, as part of the Total Army Analysis (TAA) - 2011 requirements phase, HQDA G-3 asked U.S. Army Training and Doctrine Command (TRADOC) to review SHORAD rules of allocation, doctrinal requirements and organizations. LTG Larry R. Jordan, TRADOC Deputy Commander, directed a study be completed.

Phases I and II of the study were completed and reviewed by LTG James C. Riley, Combined Arms Center Commander, in October 2002. Results of Phases I and II stated that given a SHORAD battalion in each division, current systems and threat, Rules of Allocation should not be adjusted. In response to the results of Phase I and II, LTG Riley stated concerns over the need to clearly define the evolving air threat to tactical forces.

During Phase III of the study, the TRADOC Assistant Deputy Chief for Intelligence (ADCSINT) developed a threat white paper titled "The Air Threat to the Tactical Force – The Need for Organic Air Defense" that clearly stated the air threat to tactical forces is again on the rise. The platforms of choice have changed, the white paper stated, but the threat is real and continues to proliferate. The threat white paper has been staffed throughout the Joint and Army intelligence community and is currently with the Army G-2 for final review and submission to the Defense Intelligence Agency (DIA) for acceptance. Aside from the threat, Phase III of the study had the following issues to investigate either through quantitative or qualitative analysis.

· Level and feasibility of risk associated with pooling SHORAD assets at EAD.

· Level and feasibility of risk associated with eliminating Divisional SHORAD force structure and assigning SHORAD as a secondary mission to other divisional units.

· Level and feasibility of risk associated with eliminating EAD force structure and focusing the SHORAD mission on defense of maneuver forces.

The Short-Range Air Defense study recommends delaying changes in allocation rules until the SLAMRAAM air defense system, above, is fielded.

Phase III results were briefed to LTG Riley on the 21 March 2003 with the following conclusions and recommendations presented.

· Must retain a SHORAD battalion for each division.

· Given SLAMRAAM, SHORAD battalions can transition through a mixed Avenger - SLAMRAAM structure during the TAA-11 time frame and eventually transition to a pure SLAMRAAM structure.

· Must maintain existing allocation rules (one battalion per division, three battalions per corps, and two battalions per theater) for current SHORAD force.

· Given SLAMRAAM, allocation rules can be adjusted (one battalion per division, two battalions per corps, and one battalion per theater) for the future SHORAD force.

LTG Riley will review all of the analysis presented before forwarding his requirements determination recommendation to the Army G-3.

Army Opens SHORAD Positions to Women

Although Air Defense Artillery has always been a leader among the Army's combat arms in allowing women soldiers to achieve their full potential, a recent initiative designed to integrate female soldiers into more ADA combat positions has nothing to do with equal opportunity and everything to do with meeting Army Transformation requirements. The Department of the Army recently approved our recommendation to place women, formerly restricted to Patriot and Sentinel Radar units, into Avengers. The initiative recognizes that the changing nature of the battlefield continues to blur the distinction between combat and non-combat positions.

Specifically, this initiative changes the Direct Ground Combat Probability Code (DGCPC) for selected ADA positions from DGCPC P1 (closed to women) to DGCPC P2 (open to women), and allows female soldiers to serve in division and corps ADA units.

All ADA officer areas of concentration (AOC) 14B, Short-Range Air Defense Artillery, positions in ADA's active component heavy divisional battalion headquarters and headquarters battery and the general support Avenger battery commander, executive officer, and platoon leader positions will be opened to women. All officer and enlisted positions in Army National Guard corps Avenger units will be open to women.

The initiative opens 364 of 889 officer positions in the active Army heavy divisional ADA battalions and Guard units, and 845 of 1,052 MOS 14J, 14S & 14Z positions in the ANG Corps Avenger units to women. It supports Army Transformation initiatives and current doctrine, and will provide greater assignment flexibility for commanders.

The Department of the Army has approved an initiative to place ADA women in Avenger air defense units.

Lt. Gen. John Le Moyne, U.S. Army Deputy Chief of Staff for Personnel, approved the U.S. Army ADA School's Opening Selected ADA Positions to Woman Initiative during the ADA Functional Review in March 2002, pending concurrence by Gen. Kevin P. Byrnes Commanding General, U.S. Army Training and Doctrine. Byrnes concurred with the initiative on Feb 4, and forwarded appropriate approval documents to Army Deputy Chief of Staff, Human Resources, Women in the Army Issues, Feb. 7.

Mobilization Training

The 6th ADA Brigade continues to adapt to the additional training requirements due to the mobilization of numerous Avenger battalions and Individual Ready Reserves (IRR) in support of both Clear Skies and Operation Enduring Freedom. Specific training includes: Military Occupational Specialty Qualification (MOS) training for non-MOS qualified Army National Guard (ARNG) soldiers (6.2 week Mobilization Program of Instruction; Rapid Train-Up/Refresher Trainer (RTU/REFR) for selected Individual Ready Reserve (IRR) soldiers (2-4 weeks); and selected special skills training for select soldiers, such as Slew-to-Cue (STC) for 14Ss and Enhanced Position Location Reporting System (EPLARS) for 14Js.

Due to resource constraints in terms of equipment, facilities and instructors, the brigade has constructed a training framework that allows simultaneous training of Advanced Individual Training and ARNG/IRR soldiers with little to no degradation in the quality of soldier training. This is being accomplished by acquiring the requisite number of instructors via the ARNG and short-term civilian hires; requesting from the ARNG and from TRADOC additional equipment to support the increased training load requirements, such as Sentinel Van, EPLARS, STC Avengers, and Forward Area Air Defense Command, Control and Intelligence (FAADC2I) equipment); and the use of innovative class scheduling to include reverse cycle, and multi-echelon training techniques.

The 6th ADA Brigade is postured to fully execute MOSQ mobilization training requirements (200 soldiers) for identified ARNG soldiers, as well as MOS and/or Area of Concentration (AOC) RTU/REFR training for selected IRR soldiers while continuing to "train the load."

Juniper Cobra Tests Patriot/Arrow Integration

Exercise Juniper Cobra 2003 featured live-fire exercises and the first integration of the U.S. Patriot air and missile defense system with an upper-tier system—Israel's Arrow missile defense system.

The 69th Air Defense Artillery Brigade, headquartered in Giebelstadt, Germany, conducted a joint simulations exercise in January 2002, followed by a combined live-fire exercise with the Israel Defense Forces in February. The U.S. air defenders tested the capabilities of the Patriot system by firing ten live Patriot missiles over the Negev Desert in Israel, while Israeli air defenders fired four Patriot and two Hawk missiles.

The live fire was the finale for an exercise designed to test and enhance the interoperability among the American and Israeli air defense systems. It consisted of three phases: movement to occupy battle positions, a computer assisted command post exercise that incorporated simulation of tactical ballistic missile threats with the Cooperative Air and Missile Defense Network, and the live fire.

The U.S. Navy provided a joint interface control office cell to establish a link distributing a computer-generated air picture among the U.S. Navy Aegis class cruiser, the Patriot batteries and Israel's Arrow missile system. Jointly produced with the United States, the Arrow is Israel's primary defense weapon against theater ballistic missiles, while the Patriot provides secondary coverage to intercept incoming missiles.

U.S. and Israeli Patriot and Arrow fire units integrated their firepower during Exercise Juniper Cobra.

"The difference between the Patriot and the Arrow is that the Arrow identifies and engages the missile in the upper layer of the atmosphere, where as the Patriot does so in the lower layer," said Brigadier General Dori Yair, head of the Israel Air Defense forces. "Both protection systems work simultaneously in order to provide maximum defense.

During Exercise Juniper Cobra '03, U.S. and Israeli air defenders fired 12 Patriot missiles. Battalion crews of the 6th Battalion, 52nd Air Defense Artillery qualified on required training tables as their Israeli counterparts trained in real-world maneuvers. At the end of the exercise, U.S. Patriot units remained in country to help Israeli Patriot and Arrow missile units defend their country against potential Iraqi ballistic missile strikes during Operation Iraqi Freedom.

Fine-Tuning ADA MOS Structure

In an attempt to look toward the future, the Office, Chief of Air Defense Artillery (OCADA), is exploring ways to increase the branch's ability to fight tomorrow's war. We currently have a small number of authorizations for battle staff noncommissioned officer authorizations. We have recommended increasing authorizations to permit all SSG-level and higher-staff position NCOs to carry the 2S Additional Skill Indicator (ASI). If approved, this initiative would double the enlisted battle staff knowledge base within the branch.

In another attempt to place the right people in the right positions, we are working with the Ordinance branch to move the 27X master sergeant from the Patriot battalion maintenance company to the brigade Patriot support operations section. At the same time, we would move the 27X staff sergeant from the brigade support operations section to the Patriot battalion maintenance company.

We have also been looking hard at the Air and Missile Defense (AMD) Master Gunner Program. We have won approval to train 14R master gunners and we will soon submit our MOCS proposal for the Avenger Master Gunner position. This will include 67 positions comprised of one 14S4O at each of the two light and two special battalion S3 shops. Additionally, we want to code one platoon sergeant slot in each of the Avenger batteries worldwide with this ASI. The Patriot Master Gunner course program of instruction is being developed, and we have recommended adding the Master Gunner coding to 14E sergeants first class who serve as fire direction section chiefs in each of the Patriot battalion headquarters and headquarters batteries and to the fire control and launcher platoon sergeants in each of the Patriot batteries.

American Moves Forward on Missile Defense

As Patriot missile batteries deployed for Operation Iraqi Freedom intercepted Iraqi missiles, we continued to move toward deploying enhanced theater missile defenses and a system to defend America from long-range ballistic missile attack and enhanced theater missile defense systems.

Last year, President George Bush ordered the Pentagon to field a "hit to kill" missile defense capability by the year 2004. Missile defense plan calls for 20 ground-based interceptors to protect against an intercontinental-range ballistic missile threat. Those missiles will be stored in silos at Fort Greeley, Alaska, and California.

"We have achieved a number of successes in the missile defense test program, which have added momentum to the development effort and bolstered our confidence that we will be able to meet the challenges that lie ahead," Edward E. "Pete" Aldridge Jr., undersecretary of defense acquisition, technology and logistics, told the House Armed Services Committee on March 20.

Aldridge said the Pentagon's confidence in the program lies in tests done by the Missile Defense Agency, which has oversight of the program. Overall, the Missile Defense Agency has recorded four successful tests out of five for the long-range ground-based intercepts, and was three-for-three for the short- to medium-range sea-based intercepts. The agency was five out of seven for short-range ground- based intercepts.

For short-range threats, J.D. Crouch II, assistant secretary of defense for international security policy, told the committee that the Army would continue to field additional air-transportable and mobile Patriot Advanced Capability-3 missile units with up to 346 PAC-3 missiles and 42 PAC-3 radars. To address the medium-range threat, Crouch said three Navy Aegis-class ships will be equipped with up to 20 SM-3 Standard missiles.

"This will provide a highly mobile missile defense capability to help protect U.S. forces and allies and provide some limited protection for the U.S. homeland against shorter-range missiles," Crouch said.

President Bush has directed the Pentagon to field a homeland ballistic missile defense capability by 2004.

Plan Would Make Increasing Number of Ground-Based Interceptors Easier

An environmental impact statement signed by U.S. Air Force Lt. Gen. Ronald Kadish, Director, Missile Defense Agency, will make it easier to increase the number of Ground-Based Interceptor (GBI) silos planed at Fort Greeley, Alaska. The statement is based on an initial defense operations document that calls for up to 40 silos equipped with GBIs. Although the Department of Defense currently plans to construct only 16 silos, the document would make it uneccessary to issue a

second environmental impact statement if a future decision is made to increase the number of silos.

TRADOC System Manager-Lower Tier team provides technical and tactical expertise to U.S. Patriot units in Southwest Asia.

Fort Bliss Soldiers Play Key Role in Unit Readiness for Deployed Patriot Units

On February 9, the 32nd Army Air and Missile Defense Command requested a three-person team from the TRADOC System Manager-Lower Tier go to Southwest Asia to provide technical expertise and ensure that a common set of tactics, techniques and procedures (TTPs) are being implemented throughout the U.S. Central Command Area of Operations (AOR). The team, consisting of COL Robert L. Jassey, CW-4 James Murphy and CW-3 Mark Sprinkle, spent approximately 30 days visiting every single Patriot air defense unit deployed in support of operation Enduring Freedom.

COL Jassey said "air defense soldiers are overcoming many terrain and weather challenges. Being able to visit every Patriot unit deployed in support of Operation Enduring Freedom to ensure a common set of TTPs was a great idea and a great privilege for us."

The hard work that Patriot soldiers in the CENTCOM AOR put in on the eve of Operation Iraqi Freedom to provide a joint and multinational integrated air defense umbrella for the combatant commander paid almost immediate dividends. A week into the advance on Baghdad, CENTCOM credited U.S. and Kuwait Patriot batteries with successfully intercepting every Iraqi missile launched at Kuwait except those with harmless trajectories.

Cosumano Favors Accelerating THAAD Fielding

Lt. Gen. Joseph Cosumano, commander of the U.S. Army Space and Missile Defense Command, told lawmakers April 24 at a Capitol Hill breakfast that he would like to accelerate the Theater High-altitude Area Defense (THAAD) system and the Medium Extended Air Defense System (MEADS) programs.

"We will need that two-tiered, layered defense in the future, so we would advocate any way to accelerate the fielding of THAAD," Cosumano said. The Missile Defense Agency has indicated that THAAD could provide an emergency capability by the end of 2005.

The Missile Defense Agency advocates accelerated fielding of the Theater High-Altitude Area Defense system.

Fort Bliss Reschedules Worldwide Air and Missile Defense Conference 2003

The U.S. Army Air Defense Center, Fort Bliss, Texas, has rescheduled this year's Worldwide Air and Missile Defense Conference, postponed due to Operation Iraqi Freedom, for 27-29 October. The Air Defense Artillery School will publish details about the conference on the Worldwide Air and Missile Defense Conference website at http://147.71.210.21/wwamdc as the conference date approaches.